



ERRPB Level B, C, D+ Simplified DECON Line Job Aid

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Simplified Level B, C and D+ Personnel Decontamination

The following decontamination line example and steps were developed to safely utilize the fewest number of personnel and resources possible while effectively protecting responders. These processes are based on Occupational Safety and Health Administration (OSHA) guidance found at <https://www.osha.gov/SLTC/hazardouswaste/training/decon.html>. These scaled-down procedures were developed based on the following assumptions:

- Responders are performing tasks that are not likely to result in suit contamination (i.e. air monitoring, site reconnaissance, oversight/command functions).
- Contamination will be, most likely, localized to the boots and gloves.
- Responders have some knowledge of chemicals and hazards that may be encountered during entry.
- PPE will be disposed. Any PPE that will be reused must be decontaminated on site. Depending on the types and concentrations of contaminants present, waste decontamination solutions and disposable PPE may need to be treated as a hazardous waste and disposed of accordingly.

Do not hesitate to implement a Full Decontamination Line staffed with sufficient personnel and resources if the hazards and conditions warrant the standard Full Decontamination Process.

See [SOG D-101](#) for additional information on DECON Line strategy and tactics.

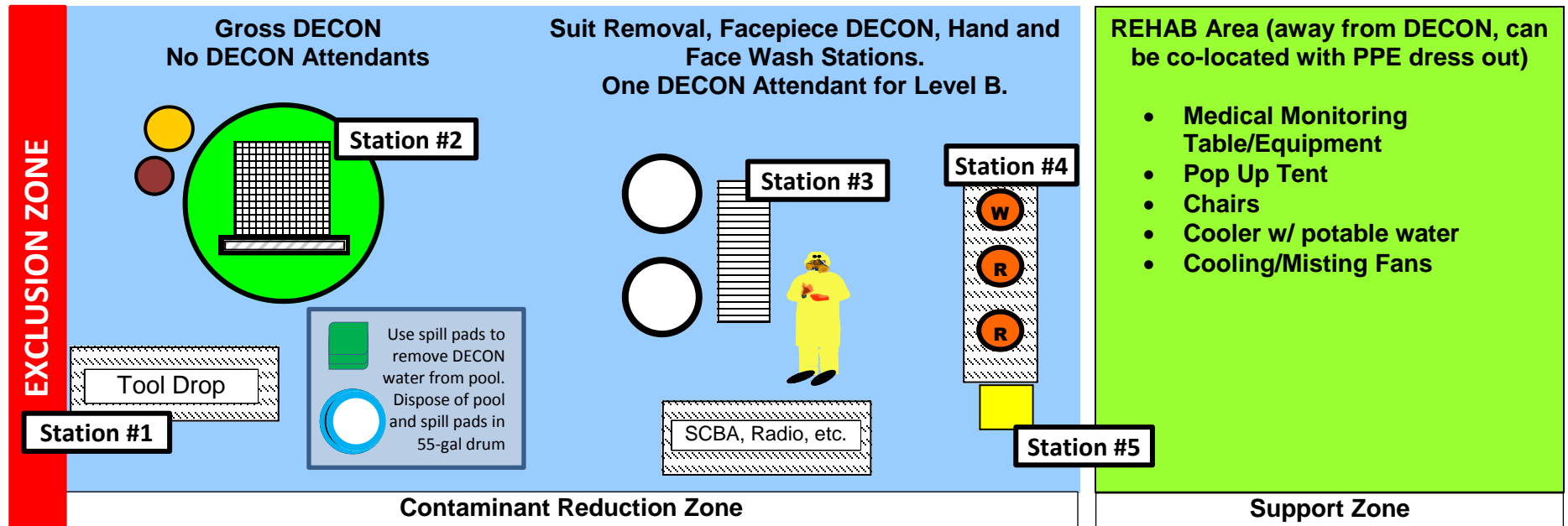


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


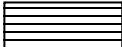
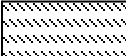








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Level B, C and D+ Simplified Decontamination Setup



Equipment List:	
3 – 4-foot tables	DECON Solutions
1 – 10X20 Tarps	55-gallon drum liners
4 – Traffic Cones	Spill Pads
1 – Roll Caution Tape	55-gallon drums
1 – Plastic Pool	Visqueen to cover tables
1 – Folding Benches	Duct Tape
1 – Saw Horses	1- MultiRAE Pro
1 – 2x2 Plastic Grate	
1 – Hand/Face Wash Station	
1 – Long Handle Brush	
1 – Hudson Sprayer	
4 – 5-gallon Buckets	

Legend			
	Tarp/Plastic		Drum Liner
	Kiddie Pool		Saw Horse
	Grating		Bench
	Table, covered w/ plastic		55-gal drum
	Spill Pads		DECON Attendant W/ MultiRAE Pro
			SCBA Mask Wash
			SCBA Mask Rinse
			DECON Solution Bucket/Brush
			Hudson Sprayer for Rinse
			Hand/Face Wash Station

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Insert pict of simple decon line

Level B, C and D+ Simplified Decontamination Steps

Station #1	<p>1. Sample and Equipment Drop: All equipment should be placed in a designated drop area for DECON. Position any equipment and/or instruments that are returning to the EZ so that subsequent Entry Teams can easily collect them. Follow the Sample DECON process for all media samples obtained in the EZ. Trash, disposable sampling equipment, extra outer gloves, etc. should be left in an appropriate receptacle in the exclusion zone.</p>	
Station #2	<p>2. Entrant completes self or assisted gross wet DECON of outer gloves and boots.</p>	
Station #3	<p>3. Entrant steps into a large poly drum liner.</p>	

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Station #3

4. If wearing an APR or level D+; proceed to Step 5.

For PAPR or SCBA:

Without Removing Air Supply

- Entrant loosens the shoulder and waist straps on SCBA or PAPR.
- Attendant disconnects Comms
- Attendant removes the SCBA from back or the PAPR from the waist, protecting facepiece, regulator and hose line.



5. Boot Removal

- Entrant sits and uses pull tab to remove tape from boots.
- Places tape in the drum liner for subsequent DECON.





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Station #3

6. Boot Removal

- Use heel-toe release to remove boots.
- Remove boots and set aside in another drum liner for bin for additional DECON.
- Attendant should assist with boot removal if the Entrant is having trouble doffing the boots.



This step is not necessary if wearing Level D+

7. Remove Tape from Facepiece

- Use pull tabs
- Pull gently
- Place tape in the drum liner



8. Pull Back Zipper Overlap. Pull back carefully, adhesive may stick to gloves.





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Station #3

9. Unzip Suit

- Use zipper extension
- Pull gently
- Zipper can be difficult to use
- Zipper extension could come loose from the fly



10. Suit Removal

- Only touch the outside of the suit with outer gloves
- Remove hood
- Remove suit from the shoulders
- Gently shake from the shoulders to release suit
- Keep outer gloves taped to suit
- Keep outer gloves on the outside of the suit



11. Suit Removal

- Remove hands from outer glove, do not remove tape, should stay with the suit. If not, remove outer gloves using the method described in Step 15
- Gently shake hand away from suit
- Using inner gloves, grasp the inside of the suit only and remove suit below knees

Outer glove stays attached to suit








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Station #3	<p>12. Suit Removal</p> <ul style="list-style-type: none">• Peel down like a banana• Only touch the inside of the suit• Push suit into drum liner	
	<p>This step is not necessary if wearing Level D+</p> <p>13. SCBA Removal</p> <ul style="list-style-type: none">• With gloved hand, remove regulator while activating the cutoff button• As you are removing the regulator, step out of the drum liner	
Station #4	<p>This step is not necessary if wearing Level D+</p> <p>14. Mask Removal</p> <ul style="list-style-type: none">• With inner gloves still on, remove mask and place in wash solution for DECON	



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Station #4	<p>15. Inner Glove Removal</p> <ul style="list-style-type: none">Remove the inner glove by gasping the palm and pulling one glove partially offUsing the inside of the glove that was partially removed, remove the other glove and place in the drum liner	<p>1. </p> <p>2. </p> <p>3. </p> <p>4. </p>
Station #5	<p>16. Hand and Face Wash. Proceed to the hand and face wash station and wash your hands and face with soap and warm water. Although a thorough wash with soap and water is preferred, utilize cleaning wipes if a wash station is not available.</p>	
REHAB	<p>17. Proceed to medical monitoring as appropriate. Hydrate and rest.</p>	



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DECONTAMINATION PLAN LEVEL B, C and D+ ENTRIES

Decontamination Procedures			
Decontamination Solution		Type of DECON:	<input checked="" type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry
Personnel (Level A, B, C) Decontamination Stations (Check all that will be utilized)			
<input checked="" type="checkbox"/> Tool/Sample Drop	<input checked="" type="checkbox"/> Outer Boot/Outer Glove Wash and Rinse	<input checked="" type="checkbox"/> Outer Boot/Outer Glove Removal	
<input type="checkbox"/> Outer Garment Wash	<input checked="" type="checkbox"/> Outer Garment Removal	<input checked="" type="checkbox"/> Respirator Removal/Cleaning	
<input checked="" type="checkbox"/> Inner Glove Removal	<input checked="" type="checkbox"/> Wash Hands and Face with Soap/Water	<input type="checkbox"/> Shower	
Personnel Decontamination Procedures (Describe the personnel DECON steps)			
<ol style="list-style-type: none">1. Sample and Equipment Drop.2. Entrant completes self or assisted gross wet DECON of outer gloves and boots.3. Entrant steps into a large poly drum liner.4. Attendant disconnects Comms.5. <<delete this step if using APR or Level D+ PPE>> Without Removing Air Supply. Entrant loosens the shoulder and waist straps on SCBA or PAPR.6. Attendant removes the SCBA from back or the PAPR from the waist, protecting facepiece, regulator and hose line.7. Boot Removal - Entrant sits and uses pull tab to remove tape from boots. Places tape in the drum liner.8. Boot Removal - Use heel-toe release to remove boots. Remove boots and set aside in another drum liner for bin for additional DECON. The attendant should assist with boot removal if the entrant is having trouble doffing the boots.9. Remove Tape from Facepiece - Use pull tabs. Pull gently. Place tape in the drum liner.10. Pull Back Zipper Overlap. Pull back carefully, adhesive may stick to gloves.11. Unzip Suit - Use zipper extension. Pull gently.12. Suit Removal - Only touch the outside of the suit with outer gloves. Remove hood. Remove suit from the shoulders. Gently shake from the shoulders to release suit. Keep outer gloves taped to suit. Keep outer gloves on the outside of the suit.13. Suit Removal - Remove hands from outer glove, do not remove tape, should stay with the suit. If not, remove outer gloves using the method described in Step 15. Gently shake hand away from suit. Using inner gloves, grasp the inside of the suit only and remove suit below knees.14. Suit Removal - Peel down like a banana. Only touch the inside of the suit. Push suit into drum liner15. <<delete this step if using Level D+ PPE>> SCBA/PAPR Removal - With gloved hand, remove regulator while activating the cutoff button or PAPR blow motor switch. As you are removing the regulator, step out of the drum liner.16. <<delete this step if using APR or Level D+ PPE>> Mask Removal - With inner gloves still on, remove mask and place in wash solution for DECON.17. Inner Glove Removal - Remove the inner glove by gasping the palm and pulling one glove partially off. Using the inside of the other glove, remove the place in the drum liner.18. Hand and Face Wash. Proceed to the hand and face wash station and wash your hands and face with soap and warm water.19. Proceed to medical monitoring as appropriate. Hydrate and rest.			



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Emergency Decontamination Procedures (Describes the steps to be followed if emergency DECON is necessary)

1. Remove tape from boots and outer gloves.
2. Removal Boots and outer gloves and bag for disposal and/or DECON.
3. Remove communication equipment if necessary.
4. Remove SCBA backpack or PAPR blower motor.
5. Remove chemical protective suit and bag for disposal.
6. Remove respirator protection and facepiece.
7. Provide needed medical care.

Equipment Decontamination Procedures (Including Heavy Equipment)

Station 1: Segregate Equipment Drop

Deposit equipment used on-site (i.e., tools, sampling devices and containers, monitoring instruments radios, clipboards, etc.) on the plastic drop cloth/sheet or in different containers with plastic liners. Each will be contaminated to a different degree and may decontaminated by different methods. Segregation at the drop reduces the probability of cross contamination. Loose leaf sampling data sheets or maps can be placed in plastic zip lock bags if contamination is evident.

Station 2: Physical Removal

Scrub equipment with detergent and water using long handle brushes or damp cloths. Sensitive equipment (i.e., radios, air monitoring) should be wiped down with a damp cloth/detergent. Consult the manufacturers for recommended decontamination solutions and procedures.

Station 3: Physical Removal with A High-Pressure Washer (Optional)

Use high pressure wash on grossly contaminated equipment that cannot be removed by hand. Pressure washing is typically used to decontaminate containment boom, boats, heavy equipment and other large equipment. Do not use high-pressure wash on sensitive or non-waterproof equipment. A specially constructed DECON pad will be needed for large equipment.

Station 4: Equipment Rinse

Wash soap off equipment with water by immersing the equipment in the water while brushing or using a low-pressure hose/sprayer. Repeat as many times as necessary.

Station 5: DECON Efficacy Screening

Use appropriate air monitoring/testing equipment (MultiRAE Pro, TVA 1000, pH Paper, Lumex, M8 Paper, etc.) or a visual assessment to verify efficacy of DECON.

- For VOC monitoring, less than TLV/TWA or background, whichever is less
- For pH monitoring, between 6 and 8
- For metallic Mercury, less than 3000 ng/m³
- For other toxic sensor monitoring, no detectable levels
- M8 Paper, no color change

Station 6: Clean Equipment Drop

Lay clean equipment on plastic sheeting. Once air dried stow/move equipment appropriate area for demobilization or reuse. Media sampling equipment will need to be further decontaminated following [SESDFPROC-205, Field Equipment Cleaning and Decontamination](#) before reuse.

Sample Decontamination Procedures

Sampling Equipment Decontamination Procedures



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Decontamination of equipment will be performed by using portable washtubs, sprayers, and disposable scrub brushes. Any equipment that cannot be thoroughly decontaminated along with the contents from the washtub will be considered hazardous and will be stored and disposed of appropriately.

Media Sampling Equipment

Media sampling equipment will need to be further decontaminated following [SESDFROC-205, Field Equipment Cleaning and Decontamination](#) before reuse.

Monitoring Equipment

If monitoring equipment becomes contaminated, it may require special cleaning techniques. Methods for decontamination will be obtained from the equipment's manufacturer.

Hand Tools

Hand tools will be cleaned as appropriate by chemical or physical means. At the end of the incident, if the hand tools cannot be decontaminated, they will be disposed of as hazardous waste.

Decontamination Waste Disposal Procedures

Decontamination waste will be segregated, characterized, and disposed of with similar appropriate waste streams generated by the response. Small amounts of liquid waste will be absorbed with absorbent pads and containerized in 55-gallon drum liners or 55-gallon drums. Other solid waste (spent PPE, Visqueen, etc.) will be containerized into 55-gallon drum liners or 55-gallon drums.

Decontamination Equipment

<input checked="" type="checkbox"/> Plastic sheeting/Tarps	<input checked="" type="checkbox"/> Tables
<input checked="" type="checkbox"/> Benches	<input checked="" type="checkbox"/> Pop-up Tents
<input type="checkbox"/> TVI Shower Tents	<input checked="" type="checkbox"/> Pools/Basins
<input checked="" type="checkbox"/> Plastic Grates	<input checked="" type="checkbox"/> Saw Horses
<input checked="" type="checkbox"/> 5-gallon buckets	<input checked="" type="checkbox"/> Long Handle Scrub Brushes
<input checked="" type="checkbox"/> Hudson Sprayers	<input type="checkbox"/> Fire Hydrant Wrench and Adaptors
<input checked="" type="checkbox"/> Traffic Cones	<input checked="" type="checkbox"/> Caution Tape
<input type="checkbox"/> Sump Pumps (hand or electric)	<input checked="" type="checkbox"/> Decontamination Solutions
<input type="checkbox"/> Hoses	<input checked="" type="checkbox"/> Sorbent Pads
<input type="checkbox"/> Hose Connections	<input type="checkbox"/> Drums/Totes for Contaminated DECON Water
<input checked="" type="checkbox"/> Spray Nozzles	<input checked="" type="checkbox"/> 55-gallon Drum Liners
<input checked="" type="checkbox"/> Trash Cans	<input checked="" type="checkbox"/> Hand and Face Wash Station
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>



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DECON Group/Division Supervisor Responsibilities

1.	Determine location of DECON area after consulting with Operations Section Chief, HAZMAT Branch Director and/or HAZMAT Group/Division Supervisor as appropriate.	
2.	Determine level of DECON required. Consult with the Technical Specialists as necessary.	
3.	Brief DECON Team of situation and procedures.	
4.	Assign tasks.	
5.	Supervise assembly of needed resources and equipment.	
6.	Supervise set up of DECON corridor.	
7.	Maintain communications with DECON Team. Coordinate with Groups, Divisions and Branches as appropriate (Medical, Site Access, Entry, etc.).	
8.	Supervise personnel protective clothing procedures and safety.	
9.	Monitor DECON activities and manpower. Maintain accountability control.	
10.	Maintain access control.	
11.	Maintain a log on personnel and team activities. Maintain accountability.	
12.	Maintain corridor operation and resources as long as needed.	
13.	Supervise DECON of Team members before shutdown of corridor.	
14.	Supervise disposition of contaminated waste and equipment.	
15.	Attempt to stay in the clean zone at all times.	
16.	Work with the safety officer in all aspects at all incidents.	

DECON Team Leader Checklist

1.	Obtain situation briefing: <ul style="list-style-type: none">a) Material and hazards involvedb) Wind and weather factorsc) Hot and control zone perimetersd) DECON corridor locatione) Overall DECON plan and tacticsf) Manpower and resources availableg) Level of protection and action neededh) Number of victims and contamination levelsi) Outside Haz Mat team or units involved	
2.	Assemble and brief DECON Team: <ul style="list-style-type: none">a) Review DECON plan and pertinent informationb) Assign tasks	



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3.	<p>Coordinate with EMS, rehab, and any other adjacent sectors before setup.</p> <ul style="list-style-type: none">a) Assure proper locations of other sectors in relation to DECON.b) Assure understanding of DECON procedures and requirements.c) Assure communications for smooth movement of victims, personnel, or equipment.d) Review protection for EMS staff.	
4.	<p>Supervise DECON corridor setup:</p> <ul style="list-style-type: none">a) Utilize steps outlined in DECON plan or DECON SOG.b) Provide for safety of staff during setup.c) Coordinate with Entry Team Leaders and conduct a walkthrough of DECON setup with Entry Teams. <p>General DECON Corridor Setup:</p> <ul style="list-style-type: none">1. Mark off DECON area with caution tape and/or traffic cones.2. Mark the entrance/exit to the Exclusion Zone and leave one opening for access into and out of DECON.3. Lay out Visqueen or tarps over the entire DECON area to contain any spilled contaminated material.4. Lay out Visqueen or tarps in appropriate areas for tool, SCBA, and clothing drops.5. Place tables for tool drops, equipment, SCBA Facepiece DECON. Cover tables and benches with Visqueen6. Provide hand and face wash and rinse buckets near the clean line7. Provide a shelter for the medical sector and rehab. Also, there should be replacement clothing available in this area, if needed.8. Extra supplies of gloves, boots, and other DECON items should be made available at or near the DECON sector. <p>Level A and B DECON Corridors:</p> <ul style="list-style-type: none">1. Place wading pool/shower in proper locations.2. Place hose lines at appropriate locations for low pressure rinses.3. Determine DECON solutions needed, mix in five (5) gallon buckets, and place at proper locations with scrub brushes.4. Place full SCBA bottles at SCBA exchange area.	
5.	<p>Supervise, monitor, and maintain control of the sector during operations:</p> <ul style="list-style-type: none">a) Provide DECON briefing to the Entry Teamsb) Maintain checklist off all personnel entering sector.c) Maintain level of protection and safety of personnel.d) Assure that all personnel are decontaminated prior to SCBA exchange or leaving the DECON area.e) Maintain access control.f) Operate outside the clean line at the access control point.g) Provide additional needed resources.	



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	<ul style="list-style-type: none">h) Maintain communications.i) Maintain accountability of all personnel at all times.	
6.	<p>Secure DECON after incident termination:</p> <ul style="list-style-type: none">a) Determine which equipment needs decontamination and which is to be disposed of.b) Assure that equipment to be decontaminated later is sealed.c) Insure that all personnel and equipment is decontaminated prior to leaving DECON.d) Insure that all DECON staff go through medical sector for evaluation.e) Insure that all contaminated waste is secured for later removal or sealed for immediate removal before sector termination.f) Document loss of contaminated materials.g) List all disposed contaminated equipment.h) Confirm termination with appropriate General Staff.	